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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/752,876

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EXAMINER

HAN, CLEMENCE S

ART UNIT

PAPER NUMBER

2665

3

DATE MAILED: 06/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/752,876

Applicant(s)

SMITH, MALCOLM M.

Examiner

Clemence Han

Art Unit

2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-12, 14-20, 22, 23 and 25-31 is/are rejected.
- 7) ☒ Claim(s) 4, 13, 21, 24 and 32 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 1–3, 5–12, 14–20, 22, 23 and 25–31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Verma et al (US Patent 6,522,880) in view of Das et al. (US Pub. 2001/0036834).

In regarding claim 1, Verma teaches a system for distributing packets for communication to a mobile unit comprising: a mobile unit 20 having a device identifier (Column 2 Line 64) and an internet protocol (IP) address comprising a first subnet identifier, the mobile unit roaming in a foreign network having a second subnet identifier (Column 2 Line 6–12). Verma, also, teaches about a mobility manager 80, a foreign agent 30 and a home agent 50. Verma, however, does not teach about multicasting. Das teaches about multicasting. Das teaches a mobility manager 130 operable to determine a multicast address for the mobile unit based on the device identifier [0023], to receive multicast address requests that include the device identifier [0023], and to communicate the multicast address

responsive to the multicast address requests [0023]; a foreign agent 140 in the foreign network, the foreign agent operable to detect the mobile unit [0023], to determine the device identifier for the mobile unit [0023], to communicate a request including the device identifier to the mobility manager [0026], to receive the multicast address from the mobility manager [0023], and to register for a multicast group identified by the multicast address [0027]; and a home agent 120 operable to receive IP packets addressed to the mobile unit, to determine the multicast address associated with the mobile unit [0027], to encapsulate the IP packets as payloads for multicast packets addressed to the multicast address 252, and to communicate the multicast packets for receipt by devices registered for the multicast group using a packet network 254. It would have been obvious to one skilled in the art to modify Verma to use multicasting as taught by Das in order to reduce handoff latency [0010].

In regarding claim 2, Verma teaches the device identifier as at least one of a mobile identification number (MIN) for the mobile unit and an equipment serial number (ESN) for the mobile unit (Column 2 Line 64).

In regarding claim 3, Das teaches the foreign agent 140 is further operable to receive the multicast packets from the packet network, to extract the IP packets

from the multicast packets, and to communicate the IP packets to the mobile unit [0022].

In regarding claim 5, Das teaches the home agent 120 determines the multicast address by communicating a request including the IP address of the mobile unit to the mobility manager and receiving the multicast address from the mobility manager responsive to the request [0022].

In regarding to claim 6, 14, 22 and 25, Verma teaches a method for registering to receive packets comprising: determining a device identifier for a mobile unit (Column 2 Line 64), the mobile unit having an internet protocol (IP) address comprising a subnet identifier for a remote network (Column 2 Line 6–12). Verma, however, does not teach about multicasting. Das teaches about multicasting. Das teaches communicating a request for a multicast address associated with the mobile unit, the request including the device identifier [0026]; receiving the multicast address [0023]; and registering for a multicast group identified by the multicast address [0027]. It would have been obvious to one skilled in the art to modify Verma to use multicasting as taught by Das in order to reduce handoff latency [0010].

In regarding to claim 7, 15, 23 and 26, Das teaches receiving multicast packets addressed to the multicast address, wherein the multicast packets contain information for communication to the mobile unit [0022].

In regarding to claim 8, 16 and 27, Das teaches the information in the multicast packets comprising IP packets addressed to the IP address for the mobile unit [0028].

In regarding to claim 9, 17 and 28, Verma teaches the information in the multicast packets comprises voice information (Column 8 Line 25–39).

In regarding to claim 10, 18 and 29, Das teaches the multicast group comprises a plurality of foreign agents 140 each receiving multicast packets containing information for communication to the mobile unit [0023] (Figure 1).

In regarding to claim 11, 19 and 30, Verma teaches each of the foreign agents receiving the multicast packets communicates the information from the multicast packets to facilitate handoff of the mobile unit [0030].

In regarding to claim 12, 20 and 31, Verma teaches the device identifier as at least one of a mobile identification number (MIN) for the mobile unit and an equipment serial number (ESN) for the mobile unit (Column 2 Line 64)..

Allowable Subject Matter

3. Claim 4, 13, 21, 24 and 32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents are cited to further show the state of the art with respect to the mobile communication in general.

U.S. Patent 5,825,759 to Liu

U.S. Patent 6,240,089 to Okanoué et al.

U.S. Patent 6,430,698 to Khalil et al.

U.S. Patent 6,473,411 to Kumaki et al.

U.S. Patent 6,691,227 to Neves et al.

5. If a copy of a provisional application listed on the bottom portion of the accompanying Notice of References Cited (PTO-892) form is not included with this Office action and the PTO-892 has been annotated to indicate that the copy was not readily available, it is because the copy could not be readily obtained when the Office action was mailed. Should applicant desire a copy of such a provisional application, applicant should promptly request the copy from the Office of Public

Records (OPR) in accordance with 37 CFR 1.14(a)(1)(iv), paying the required fee under 37 CFR 1.19(b)(1). If a copy is ordered from OPR, the shortened statutory period for reply to this Office action will not be reset under MPEP § 710.06 unless applicant can demonstrate a substantial delay by the Office in fulfilling the order for the copy of the provisional application. Where the applicant has been notified on the PTO-892 that a copy of the provisional application is not readily available, the provision of MPEP § 707.05(a) that a copy of the cited reference will be automatically furnished without charge does not apply.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clemence Han whose telephone number is (703) 305-0372. The examiner can normally be reached on Monday-Friday 8 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (703) 308-6602. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

C. H.

Clemence Han
Examiner
Art Unit 2665



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SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600